



Engineering Division

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Telephone (781) 316-3320 Fax (781) 316-3281

Date: March 19, 2021
To: Kelly Lynema; Senior Planner
From: Wayne Chouinard, Town Engineer
RE: Plan review for 1165R Mass Ave. Comprehensive Permit

The Town of Arlington Engineering Division is in receipt of the information related to the Comprehensive Permit Application for 1165R Mass Avenue provided by the DPCD on Thursday March 11, 2021 and available on the DPCD website. The Engineering Division will respond specifically to the content related to stormwater, site utilities and accessibility. It is expected that a final review will be required for final construction level documentation.

The comments provided are based on the following documents as listed below:

1. "Drainage Report for 1165R Mass MA Property , LLC Proposed Residential Development", dated March 4, 2021
2. Proposed Site Plan Documents for Proposed Residential Development 1165-1167 Massachusetts Ave., Town of Arlington MA, Rev. 3 dated 07/15/2020.
3. Traffic Impact Report, 1165R Mass Ave. Apartments, 1165R Mass Ave., Arlington MA, dated July 6, 2020.

Comments are as follows:

Drainage Report: The Engineering Division has reviewed the Drainage Report and finds the information acceptable in format, concept and methodology. With the exception of the following items the Drainage Report appears to be an accurate analysis:

- Clarify discrepancy of the building outline of the connection between Building #1 and #3 on the Site and Subsurface Exploration Location Plan and the Proposed Conditions Watershed Map.
- Clarify the location of CB-1 indicated on the Proposed Inlet Map as it conflicts with the location of CB-1 on the Operation & Maintenance Location Map.

Site Plan Documents:

Sewer:

- Details and offset dimensions to ensure proper spacing between water/sewer services, connections and crossings.
- Existing sewer lines should be replaced and not reused.
- Floor drain and sewer connection details should be provided for all garage facilities serving more than five (5) vehicles
- New sewer service lines from multi-family buildings should be a minimum of 8" diameter.
- It is recommended that an Inflow/Infiltration (I/I) mitigation fee be assessed to be used to reduce I/I of the Town sewer system in the amount equal to four(4) times the design flow of the project.

Water:

- All connections to the Town water system require a triple gated connection to provide maximum shut-off and distribution control.
- Connections to the Town water main requires a tee connection.
- Existing water meter vault near Mass Ave. should be removed and new water meter/s should be located within each building.

- Suitable calculations should be performed to verify that the 6" existing main serving the property from Mass Ave. has suitable capacity to provide the necessary domestic water supply and fire flow for the proposed project.
- Connections to the Town water distribution system on Ryder St. should include the replacement of the existing water main located in Ryder Street due to the existing age, condition and material as well as;
- Connect the dead end configuration of the water main on Ryder Street by extending it to the existing water main located in Forest Street.

Stormwater/Flood Plain:

- Though not required under the Town Stormwater Mitigation Bylaw, it is recommended to use any opportunity to collect and infiltrate stormwater runoff where possible to reduce the effects of climate change and increase stormwater water runoff quality.
- Suitable documentation of groundwater conditions have not been provided. A verification statement should be provided to ensure that no structures are built below the estimated seasonal high ground water elevation (footings excluded).
- Due to the proximity to the 100 year flood elevation it is recommended that the Frimpter Method shall be utilized with the observed local ground water readings and in conjunction with the USGS Groundwater Well Network. At a minimum these test pits should be installed in the proposed foot print of the buildings.
- Please comment on potential for scouring potential as well as concerns about runoff and erosion along the back(north) wall of Building #4 where the direction of flow of Ryder Brook is proposed to be re-directed. Provide calculations and/or analysis that stormwater flow will not erode and undermine the foundation/footings at the rear of Building #4

CATV:

- What are the off-site upgrade requirements necessary for the CATV requirements for proposed development?
 - Will current utility pole and cable configurations accommodate the required cable, electric and telephone wires without the need for additional utility poles or improvements outside of the project locus? Any installation of new utility poles or underground conduit in the public right of way will require a Grant of Location from the Board of Selectmen. This information should be provided as part of the application process to evaluate the entirety of impacts and effects.

Accessibility

- The Traffic Impact Report indicates that Quinn Road is a private way. However, Town records indicate that Quinn Road is a public way. The layout for Quinn Road was approved on April 9, 1957 and the roadway was accepted on April 14, 1958 by the Board of Survey.
- It is unclear how safe access and egress to Mass Avenue, Forest Street and the Minuteman Bike path is intended to occur based on the site plans. It is recommended the applicant provide clear depiction of access and egress from the project site for all modes of travel, including vehicles, cyclists and pedestrians. The current plan simply provides access off the project property into a complex and confusing assortment of driveways within Mirak Innovation Park.
- The Traffic Impact Report indicates that "Pedestrian and bicycle accommodations and safety are paramount for a successful development in an urban area." It is recommended that the project be required to provide connectivity for both pedestrians and cyclists including:
 - A clear connection and accessible pedestrian path to Forest St. by installing necessary sidewalks and curb ramps from the Ryder Street driveway exit to Forest Street, also;
 - a clear connection and accessible pedestrian path to Mass Avenue by installing necessary sidewalks and curb ramps along the expected pedestrian routes towards Mass Ave. Currently there are Easements "A and B" connecting to Quinn Road indicated on the ALTA plans, but no proposed work for improving pedestrian accessibility.
 - Update the deteriorated and poor condition roadway along the Ryder Street private way to provide a smooth and safe route for vehicles to access Forest Street and bicycles to access the Minuteman Bike Path.
 - Pedestrian improvements should be considered in Mirak Innovation Park West Driveway. The area is immediately adjacent to 1171 Mass Ave. as this is the shortest and most direct route to connect pedestrians to Mass Avenue.

Landscaping:

- If possible, street tree plantings should be provided in a grass strip along Quinn Road as part of the pedestrian accessible path to Mass Avenue.
- Project should provide screening of parking areas and buildings from the immediate residential abutters if possible.

Lighting:

- Additional lighting should be considered and included along any defined and improved pedestrian pathways connecting to Forest St. and/or Quinn Road. Night sky reduction, light pollution, cut off fixtures and glare should be ensured through the approved Lighting Plan.

Traffic:

- Additional comments pertaining to the Traffic Impact Report is deferred to the Transportation Advisory Committee.